Exhibit 300: Capital Asset Summary

Part I: Summary Information And Justification (All Capital Assets)

Section A: Overview & Summary Information

Date Investment First Submitted: 2009-06-30
Date of Last Change to Activities: 2012-06-26
Investment Auto Submission Date: 2012-02-28
Date of Last Investment Detail Update: 2012-02-24
Date of Last Exhibit 300A Update: 2012-08-23
Date of Last Revision: 2012-08-23

Agency: 021 - Department of Transportation **Bureau:** 12 - Federal Aviation Administration

Investment Part Code: 01

Investment Category: 00 - Agency Investments

1. Name of this Investment: FAAXX155: Next Generation Air/Ground Communications (NEXCOM) Segment 1a

2. Unique Investment Identifier (UII): 021-211295869

Section B: Investment Detail

1. **Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

The Next Generation Air/Ground Communications (NEXCOM) Segment 1a Multimode Digital Radio (MDR) program first received approval in May 1998, received a JRC Revalidation Decision in May 2000, and was Rebaselined in December 2005. NEXCOM will be implemented in two segments – two separate investment programs. NEXCOM Segment 1a addresses the high- and ultrahigh-sector air traffic voice channels for aircraft flying in the en route environment (above 24,000 feet). The new radios are Multimode Digital Radios (MDRs) manufactured and delivered by ITT. The first NEXCOM installation was in 2004 and by 2013, NEXCOM Segment 1a will replace all en route radios (at 1205 RCAG and BUEC sites) with VHF (Very High Frequency) and UHF (Ultra-High Frequency) radios. The investment program has been designed for growth and flexibility, and NEXCOM Segment 1a is currently installing radios at sites earlier than scheduled. In FY13, MDRs will be installed at the final 50 sites completing 100% of the total en route sites. The MDRs can emulate the existing analog protocol, thus facilitating transition, or they can operate in the spectrally efficient 8.33 kHz voice mode currently used in Europe or with additional expenditures in a later phase, they can operate in the VDL-3 mode especially designed for Air Traffic Control. The VDL mode can provide integrated data and voice. The 8.33 kHz voice-only mode can recover spectrum needed for the Data Communications program, a key component of the Next Generation Air

Traffic Control System (NextGen). At this time, the FAA is conducting the Data Communications investment analysis to analyze the alternatives for the future of ATC Communications. Regardless of the alternative chosen, the MDRs remain key building blocks for NextGen because of their operational flexibility and capabilities. The NEXCOM Segment 1a investment has dependency relationships with the VSCS, FTI, DATACOMM, NVS, and NEXCOM Segment 2 investments.

2. **How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

NEXCOM Segment 1a's new VHF and UHF radio technologies support the goals to reduce congestion and to increase economic competiveness, which it does by making more efficient use of existing radio spectrum and replacing older, unrepairable radios. The previous radios were installed in the 1960s and 1970s, and were expected to last only thirty years. Over the years, older radios are failing at an increased rate. They have also become difficult to repair or replace since many of the radio parts are now obsolete. By replacing these old radios and their high failure rates with the newer VHF and UHF radios, NEXCOM Segment 1a is reducing the future increase in O&M costs, which is a cost avoidance. Additionally, with more planes flying during peak periods and Air Traffic Controllers becoming empowered to work more efficiently, more radio spectrum will be required for Air Traffic Control (ATC) communications; either for more voice, data, Next Generation Air Transportation System (NextGen) technologies or a combination of these. If the NEXCOM Segment 1a program is not fully funded, it will not complete on time by 2013. This will cause a continued stress on the current radios as these older radios become unrepairable with obsolete parts.

3. **Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

In 2011 alone, the NEXCOM Segment 1a investment will have deployed close to 2,000 UHF and VHF radios into the NAS and will have completed 139 radio installations at deployment sites across the country. The investment will also complete its 75% operational readiness milestone, which will have been accomplished ahead of schedule. NEXCOM Segment 1a remains on target to complete all radio purchases and site installations by FY2013.

4. **Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

In 2012, the NEXCOM Segment 1a investment will deploy close to 1,800 UHF and VHF radios in to the NAS and will complete 119 radio deployments across the country. At the conclusion of FY2012, the investment will have replaced 95% of the radios that were scheduled for replacement during the lifecycle of NEXCOM Segment 1a. In 2013, NEXCOM Segment 1a will deploy 1,000 UHF and VHF radios in the NAS and will complete the remaining 50 en route environment sites. Once new radios are installed at the remaining sites, all sites will have been cutover with the new radios. With this, the investment will be complete and will likely do so with a positive cost and schedule variance.

5. **Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2005-12-14

Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	$3.4	$0.0	$0.0	$0.0
DME (Excluding Planning) Costs:	$273.2	$20.0	$19.7	$8.4
DME (Including Planning) Govt. FTEs:	$58.6	$8.6	$8.4	$6.4
Sub-Total DME (Including Govt. FTE):	$335.2	$28.6	$28.1	$14.8
O & M Costs:	$2.5	$1.4	$1.8	$2.3
O & M Govt. FTEs:	$11.5	$4.4	$5.2	$6.0
Sub-Total O & M Costs (Including Govt. FTE):	$14.0	$5.8	$7.0	$8.3
Total Cost (Including Govt. FTE):	$349.2	$34.4	$35.1	$23.1
Total Govt. FTE costs:	$70.1	$13.0	$13.6	$12.4
# of FTE rep by costs:	587	94	94	81
Total change from prior year final President's Budget ($)		$0.0	$0.0	
Total change from prior year final President's Budget (%)		0.00%	0.00%	

2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:

Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value ($M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded		DTFA0101D03009									
Awarded		DTFA0102CA0016									
Awarded		DTFAWA09D00062									

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:
NEXCOM Segment 1a employs a performance based management system (PBMS) compliant with Earned Value Management System ANSI/EIA 748A Standard to proactively manage the performance of all program level government and contractor efforts. Support contractors' performance is proactively monitored and managed on a monthly basis. EVM was implemented in FY2003 for the full investment and covers the design, development, production, deployment and support of the MDR. The PBMS covers 100% of the activities and participating organizations contributing to the investment objectives, including the production contractor and related subcontractors; FAA organizations and supporting contractors responsible for the planning, management, testing and support of the MDR; FAA organizations and supporting contractors responsible for the deployment and fielding of the radio; and additional contractors contributing support equipment and services. The EVM-based PBMS manages 100% of the investment by proactively monitoring scope, schedule and cost on a monthly basis to mitigate the risk of not having EVM on the contracts. In April 2005, NEXCOM Segment 1a initiated an independent review of its program management practices and EVM capabilities. The review rigorously assessed the program's EVM implementation, using FAA approved compliance criteria aligned with the ANSI/EIA 748A Standard. The assessment determined that NEXCOM Segment 1a has established compliant EVM practices at the program level consistent with the ANSI/EIA 748A Standard. Future contracts subject to FAA EVM requirements will comply with the policy. The AUATAC contract is a T&M contract and is performance based. The contractor is awarded a performance fee based on quarterly assessments rating by the FAA. The FAA evaluates quality, efficiency, schedule, and overall performance and products. The award fee is split between the company and the employees.

Exhibit 300B: Performance Measurement Report

Section A: General Information

Date of Last Change to Activities: 2012-06-26

Section B: Project Execution Data

Table II.B.1 Projects

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost ($M)
1	NEXCOM Segment 1a FY11 Q4 Activities	NEXCOM will install new Very High Frequency (VHF) and Ultra High Frequency (UHF) radios at En Route Remote Communications Air Ground (RCAG) and Back Up Emergency Communications (BUEC) locations in the three different Service Areas. (This project is part of the program's Acquisition Program Baseline Milestone Last Site Operational Readiness Decision scheduled for completion in FY13).			
2	NEXCOM Segment 1a FY12 Activities	NEXCOM will install new Very High Frequency (VHF) and Ultra High Frequency (UHF) radios at En Route RCAG and BUEC locations in the three Service Areas. (This project is a part of the program's Acquisition Program Baseline Milestone Last Site Operational Readiness Decision scheduled for completion in FY13).			

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities ($M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance ($M)	Cost Variance (%)	Total Planned Cost ($M)	Count of Activities
1	NEXCOM Segment 1a FY11 Q4 Activities							
2	NEXCOM Segment 1a FY12 Activities							

Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
NONE								

Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Provide cumulative Mean Time Between Failure for NexCom Very High Frequency radios.	Hours	Customer Results - Service Coverage	Over target	11000.000000	45000.000000	50000.000000	45000.000000	Semi-Annual
Provide Mean Time Between Depot Returns for NexCom Very High Frequency Radio receivers.	Hours	Customer Results - Service Coverage	Over target	10000.000000	35000.000000	47000.000000	35000.000000	Semi-Annual
Provide failure rate per year for NexCom Very High Frequency radio receivers.	Percentage	Technology - Efficiency	Under target	5.000000	3.500000	1.520000	3.000000	Semi-Annual
Provide number of NexCom Very High Frequency radios (receivers and transmitters) returned to Ops stock.	Radios	Technology - Reliability and Availability	Under target	0.000000	1000.000000	928.000000	950.000000	Monthly
Provide number of NexCom Ultra High Frequency radios (receivers and transmitters) returned to Ops stock.	Radios	Technology - Reliability and Availability	Under target	0.000000	500.000000	363.000000	500.000000	Monthly